

Percutaneous Vertebral Augmentation

ICD-9-CM Coordination &
Maintenance Committee Meeting
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Code History

- Through 2004, there were no specific codes for vertebroplasty and kyphoplasty
- General code 78.49 was utilized to report procedures
- New codes for vertebroplasty and kyphoplasty were discussed at the April 1, 2004 meeting of the ICD-9-CM Coordination & Maintenance Committee
 - There was general support for new and separate codes to capture the two procedures
 - Concern was expressed that the proposed inclusion term for inflatable balloon could lead coders to believe the proposed kyphoplasty code applied only to one manufacturer's product
 - Comments were also made suggesting that inclusion terms clarify the fact that kyphoplasty procedures do not reduce the fracture but rather simply attempt to restore some of the height lost because of the fracture

Code History

- For FY 2005, separate codes were created to differentiate vertebroplasty and kyphoplasty procedures:

81.65 Vertebroplasty

Injection of bone void filler (cement)
(polymethylmethacrylate) (PMMA) into the
diseased or fractured vertebral body

Excludes

kyphoplasty (81.66)

81.66 Kyphoplasty

Insertion of inflatable balloon, bone tamp, or other
device to create a cavity for partial restoration of
height of diseased or fractured vertebral body
prior to injection of bone void filler (cement)
(polymethylmethacrylate) (PMMA)

Excludes

vertebroplasty (81.65)

Boundaries of 81.66

81.66 Kyphoplasty

Insertion of inflatable balloon, bone tamp, or other device to create a cavity for partial restoration of height of diseased or fractured vertebral body prior to injection of bone void filler (cement) (polymethylmethacrylate) (PMMA)

Excludes

vertebroplasty (81.65)

- Since the adoption of code 81.66, additional techniques have been developed and approved to achieve vertebral augmentation, the effect of kyphoplasty
- Current proposal is to broaden the nomenclature for code 81.66 to incorporate all vertebral augmentation techniques

Issue

- Code 81.66 current nomenclature refers to a specific technique using a proprietary device from a particular manufacturer
 - Kyphoplasty refers specifically to vertebral augmentation performed with a specific manufacturer's balloon product

Kyphon + arthroplasty = **Kyphoplasty**

- The inclusion terms cite other devices but the code definition restricts this
- ICD-9-CM convention is that codes are not exclusive to a particular manufacturer or product

Issue

- The inclusion note for code 81.66 states the procedure creates “a cavity”
 - The manufacturer considers the creation of “cavities” or “voids” proprietary to its product
- The inclusion notes indicate that the procedure is performed for partial restoration of height to the vertebral body
 - There is clinical uncertainty over whether height restoration is achieved, though it may be a goal
 - Augmentation and height restoration are two separate clinical issues

Conventional Vertebroplasty

- Single step procedure
- Cement is injected under high pressure
- Cement follows natural fracture lines
- Stabilizes fracture to reduce pain

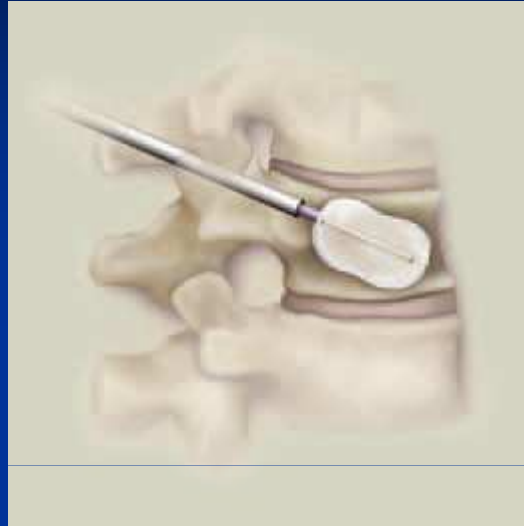


Vertebral Augmentation

- Two step procedure
 1. The vertebral body is augmented using a mechanical device to create spaces within the bone
 2. Cement is subsequently injected into the vertebral body under low pressure
- Cement flow is directed into the space/cavity/void created within the vertebral body
- Stabilizes fracture to reduce pain
 - Height restoration may also be accomplished

A variety of techniques are used to perform percutaneous vertebral augmentation

Kyphoplasty



Spineoplasty

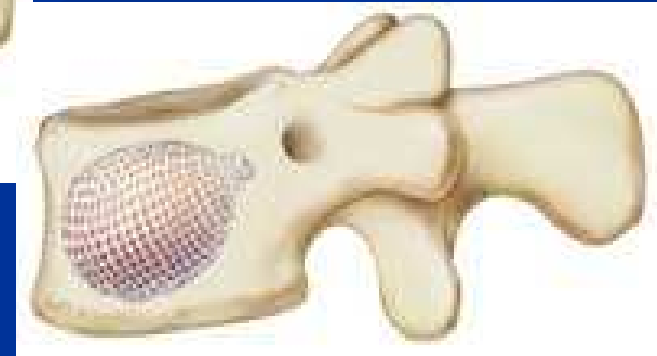
Optimesh® by Spineology



Step 1: A cavity is created in the defect through a small tube with a proprietary expanding shaping tool



Step 2: The mesh is inserted empty through the tube



Step 3: The mesh is filled with bone filler and released

StaXx[®] FX System

StaXx[®] FX System by Spine Wave, Inc.



SKyphoplasty

SKy Bone Expander® by Disc-o-tech



SKy before expansion

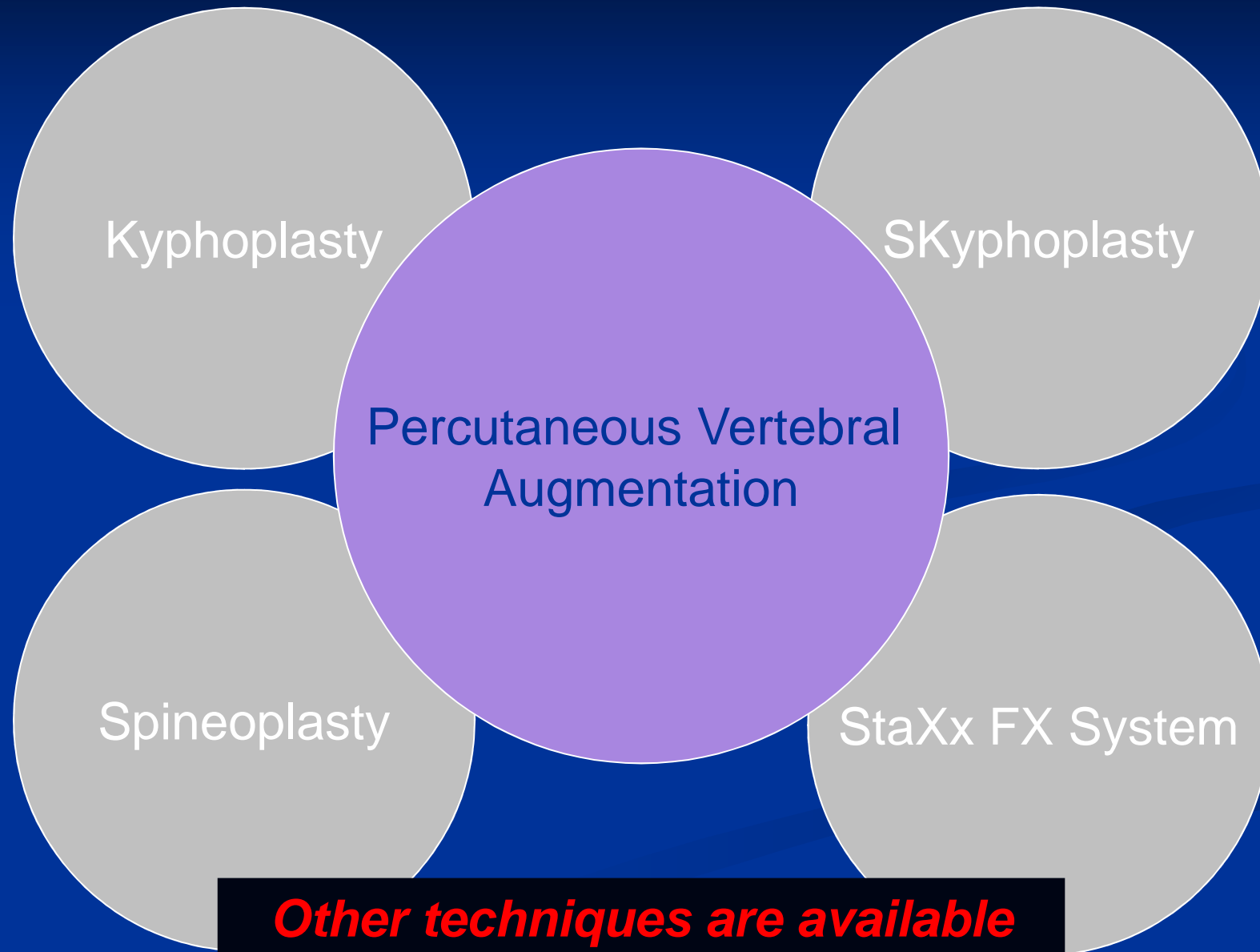


SKy after expansion



SKy Bone Expander System

Technique Snapshot



Other techniques are available

Proposed Code Revision

- Revise the definition of 81.65 from “vertebroplasty” to “percutaneous vertebroplasty”
- Revise the definition of 81.66 from “kyphoplasty” to “percutaneous vertebral augmentation”
 - Procedure is performed percutaneously
 - Procedure augments the vertebral body
 - Percutaneous vertebral augmentation is the generic terminology used by medical professionals to describe this technique